

Applicants: Tove Ringerike et al.  
U.S. Serial No.: Not Yet Known  
Filed: Herewith  
Page 6

**Amendments to the Claims**

Please cancel claims 10, 14, 17-23 and 25-43 without disclaimer or prejudice to applicants' right to pursue the subject matters of these claims.

Pursuant to 37 C.F.R. §1.121(c), this listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims**

1. (Original) An isolated nucleic acid molecule coding the expression box with the formula:  $S_1-S_2-S_3$  wherein:

$S_1$  is a promoter sequence, or it is absent,

$S_2$  is a known reporter gene sequence,

$S_3$  is a regulatory 3'UTR sequence, or it is absent,

where the promoter sequence and the regulatory 3'UTR sequence originate from a known cytokine gene, and are the controlling sequences of said cytokine.

2. (Currently Amended) A The nucleic acid molecule according to claim 1, characterised in that the reporter gene is a gene coding a Green Fluorescent Protein (GFP), possibly selected from its variants: d1EGFP, d2EGFP, EGFP or EGFP-F.

3. (Currently Amended) A The nucleic acid molecule according to claim 1, characterised in that the promoter sequence and regulatory 3'UTR sequence originate from a cytokine selected from among the following: IL-1 $\beta$ , IL-2, TNF $\alpha$ , IL-4, IL10 or INF $\gamma$ .

Applicants: Tove Ringerike et al.  
U.S. Serial No.: Not Yet Known  
Filed: Herewith  
Page 7

4. (Currently Amended) A The nucleic acid molecule according to claim 1, characterised in that it is an expression box contained in a plasmid selected from among the following: p1-5'IL1 $\beta$ /d1EGFP-N1 (SEQ ID NO:1), p2-5'IL1 $\beta$ /d1EGFP-N1 (SEQ ID NO:2), p3-5' IL1 $\beta$ /d1EGFP-N1 (SEQ ID NO:3), p4-5'IL1 $\beta$ /d1EGFP-N1 (SEQ ID NO:4), p1-5'3' IL1 $\beta$ /d1EGFP-N1 (SEQ ID NO:5), p2-5'3'IL1 $\beta$ /d1EGFP-N1 (SEQ ID NO:6), p3-5'3'IL1 $\beta$ /d1EGFP-N1 (SEQ ID NO:7), p4-5'3'IL1 $\beta$ /d1EGFP-N1 (SEQ ID NO:8), p1-5'IL2/EGFP-1 (SEQ ID NO:9), p1-5'IL2/d2EGFP-1 (SEQ ID NO:10), p1-5'3'IL2/d2EGFP-1 (SEQ ID NO:11), p1-3'TNF $\alpha$ /d1EGFP-N1 (SEQ ID NO:12), p2-3'TNF $\alpha$ /EGFP-F (SEQ ID NO:13), p3-3'TNF $\alpha$ /EGFP-F (SEQ ID NO:14), p1-5'TNF $\alpha$ /d1EGFP-N1 (SEQ ID NO:15), p1-5'3'TNF $\alpha$ /d1EGFP-N1 (SEQ ID NO:16), p1-3'IL4/d1EGFP-N1 (SEQ ID NO:17), p2-3'IL4/EGFP-F (SEQ ID NO:18), p3-3'IL4/EGFP-F (SEQ ID NO:19), p4-3'IL4/CA-EGFP (SEQ ID NO:20), p5-3'IL4/d1EGFP-N1 (SEQ ID NO:21), p1-5'IL4/EGFP-1 (SEQ ID NO:22), p1-5'IL4/d1EGFP-N1 (SEQ ID NO:23), p2-5'IL4/EGFP-1 (SEQ ID NO:24), p2-5'IL4/d1EGFP-N1 (SEQ ID NO:25), p1-5'3'IL4/EGFP-1 (SEQ ID NO:26), p1-5'3'IL4/d1EGFP-N1 (SEQ ID NO:27), p2-5'3'IL4/d1EGFP-N1 (SEQ ID NO:28), p1-5'INF $\gamma$ /EGFP-1 (SEQ ID NO:29), p1-5'INF $\gamma$ /d2EGFP-1 (SEQ ID NO:30), p1-5'3'INF $\gamma$ /d2EGFP-1 (SEQ ID NO:31), p1-5'IL10/EGFP-1 (SEQ ID NO:32), p1-5'3'IL10/EGFP-1 (SEQ ID NO:33), p2-5'IL10/d2EGFP-1 (SEQ ID NO:34), p2-5'3'IL10/d2EGFP-1 (SEQ ID NO:35).

5. (Original) An expression vector containing a nucleic acid molecule coding an expression box with the formula:

S1-S2-S3, wherein

S1 is a promoter sequence, or it is absent,

S2 is a known reporter gene sequence,

S3 is a regulatory 3'UTR sequence, or it is absent,

where the promoter sequence and the regulatory 3'UTR sequence originate from a known cytokine gene, and are the controlling

Applicants: Tove Ringerike et al.  
U.S. Serial No.: Not Yet Known  
Filed: Herewith  
Page 8

sequences of said cytokine.

6. (Currently Amended) ~~An~~ The expression vector according to claim 5, characterised in that the reporter gene is a gene coding a Green Fluorescent Protein, possibly selected from its variants: d1EGFP, d2EGFP, EGFP or EGFP-F.

7. (Currently Amended) ~~An~~ The expression vector according to claim 5, characterised in that the promoter sequence and regulatory 3'UTR sequence originate from a cytokine selected from among the following: IL-1 $\beta$ , IL-2, TNF $\alpha$ , IL-4, IL10 or INF $\gamma$ .

8. (Currently Amended) ~~An~~ The expression vector according to claim 5, characterised in that it is a plasmid selected from among the following: p1-5'IL1 $\beta$ /d1EGFP-N1 (SEQ ID NO:1), p2-5'IL1 $\beta$ /d1EGFP-N1 (SEQ ID NO:2), p3-5' IL1 $\beta$ /d1EGFP-N1 (SEQ ID NO:3), p4-5'IL1 $\beta$ /d1EGFP-N1 (SEQ ID NO:4), p1-5'3' IL1 $\beta$ /d1EGFP-N1 (SEQ ID NO:5), p2-5'3'IL1 $\beta$ /d1EGFP-N1 (SEQ ID NO:6), p3-5'3'IL1 $\beta$ /d1EGFP-N1 (SEQ ID NO:7), p4-5'3'IL1 $\beta$ /d1EGFP-N1 (SEQ ID NO:8), p1-5'IL2/EGFP-1 (SEQ ID NO:9), p1-5'IL2/d2EGFP-1 (SEQ ID NO:10), p1-5'3'IL2/d2EGFP-1 (SEQ ID NO:11), p1-3'TNF $\alpha$ /d1EGFP-N1 (SEQ ID NO:12), p2-3'TNF $\alpha$ /EGFP-F (SEQ ID NO:13), p3-3'TNF $\alpha$ /EGFP-F (SEQ ID NO:14), p1-5'TNF $\alpha$ /d1EGFP-N1 (SEQ ID NO:15), p1-5'3'TNF $\alpha$ /d1EGFP-N1 (SEQ ID NO:16), p1-3'IL4/d1EGFP-N1 (SEQ ID NO:17), p2-3'IL4/EGFP-F (SEQ ID NO:18), p3-3'IL4/EGFP-F (SEQ ID NO:19), p4-3'IL4/CA-EGFP (SEQ ID NO:20), p5-3'IL4/d1EGFP-N1 (SEQ ID NO:21), p1-5'IL4/EGFP-1 (SEQ ID NO:22), p1-5'IL4/d1EGFP-N1 (SEQ ID NO:23), p2-5'IL4/EGFP-1 (SEQ ID NO:24), p2-5'IL4/d1EGFP-N1 (SEQ ID NO:25), p1-5'3'IL4/EGFP-1 (SEQ ID NO:26), p1-5'3'IL4/d1EGFP-N1 (SEQ ID NO:27), p2-5'3'IL4/d1EGFP-N1 (SEQ ID NO:28), p1-5'INF $\gamma$ /EGFP-1 (SEQ ID NO:29), p1-5'INF $\gamma$ /d2EGFP-1 (SEQ ID NO:30), p1-5'3'INF $\gamma$ /d2EGFP-1 (SEQ ID NO:31), p1-5'IL10/EGFP-1

Applicants: Tove Ringerike et al.  
U.S. Serial No.: Not Yet Known  
Filed: Herewith  
Page 9

(SEQ ID NO:32), p1-5'3'IL10/EGFP-1 (SEQ ID NO:33), p2-5'IL10/d2EGFP-1 (SEQ ID NO:34), p2-5'3'IL10/d2EGFP-1 (SEQ ID NO:35).

9. (Currently Amended) A single-celled host transformed or transfected with a DNA molecule according to ~~one of claims 1 to 4.~~

10. (Canceled)

11. (Currently Amended) A The single-celled host according to claim 9, characterised in that it is selected from the group encompassing bacteria, yeast, mammalian cells, plant cells, insect cells, as well as eukaryotic cell lines.

12. (Currently Amended) A The single-celled host according to claim 11, characterised in that it is an immortal mammalian cell line, preferentially descendant from cells of the immune system.

13. (Currently Amended) A The single-celled host according to claim 11, characterised in that it is a cell line selected from among T cell leukemia cells, thymoma, mast cells, macrophage-monocytes, fibroblasts and keratinocytes.

14. (Canceled)

15. (Currently Amended) A The single-celled host according to claim 11, characterised in that it is a cell line selected from among the following: EL4, BW5147.3, C57.1, J774A.1, 3T3 L1, MC/9 and HEL-30.

16. (Currently Amended) A The single-celled host according to claim 11, characterised in that it is a cell line selected from among C/p1-5'3'TNF $\alpha$ -dEGFP/2 (deposited in ECACC, Accession No. 3091202), EL/p1-5'IL2-dEGFP/6 (deposited in ECACC, Accession No. 3091204), EL/p2-5'IL4-dEGFP/2 (deposited in ECACC, Accession No. 3091205), EL/p1-5'IFN $\gamma$ -dEGFP/3 (deposited in ECACC, Accession No. 3091206), EL/p2-5'IL10-dEGFP/5 (deposited in ECACC, Accession No. 3091207), J/p4-5'IL1  $\beta$ -dEGFP/4 (deposited in ECACC, Accession No. 3091208).

17-23. (Canceled)

24. (Currently Amended) A method of obtaining characteristics of the tested substance, characterised in that

- a) the tested substance is put into contact with the cell line according to ~~one of claims 9 to 16, or a cell line belonging to a collection of cell lines according to one of claims 17 to 23,~~
- b) it determines a change in the level of expression of a reporter gene caused by the tested substance,
- c) a change in the level of expression described in (b) is accepted as characteristic of the tested substance.

25-43. (Canceled)